INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT HAZARDOUS WASTE POST-CLOSURE PERMIT

Name of Permittee:	BP Products North America	ca Inc., Lakefront Site	
Facility Location:]	NE of 119 th & Front Streets	s, Whiting, IN	
EPA Identification	Number: IND000810861		
Issuance Date:			
Expiration Date:			·

Authorized Activities

Pursuant to Indiana Environmental Statutes (IC 13) and the rules promulgated there under and codified in Title 329 of the Indiana Administrative Code, Article 3.1 (329 IAC 3.1), the State permit conditions (hereinafter called the permit) of the Resource Conservation and Recovery Act of 1976 (RCRA) permit are issued to BP Products North America, Inc., Lakefront facility, (hereinafter called the Permittee) to monitor and maintain a closed hazardous waste landfill located in Whiting, Indiana, Section 8, Township 37 N, Range 9 W at latitude 41° 40′ 30″ N and longitude 87° 28′ 45″ W, Whiting Quadrangle, on the U.S. Geological Survey topographic map.

The State RCRA program is authorized under 40 CFR Part 271 and Section 3006 of RCRA to administer the hazardous waste management program in lieu of the Federal program.

The Permittee operated a hazardous waste surface impoundment, which, through closure, was converted to a landfill. The legal status of the unit hereafter is that of a landfill, however, the past status of the unit may still be referenced for clarity.

The Permittee is required to maintain and monitor the closed landfill for the duration of this permit.

Federal regulations 40 CFR Parts 260 through 270 have been incorporated by reference. Where exceptions to incorporated Federal regulations are necessary, these exceptions will be noted in the text of the State rule (329 IAC 3.1-1-7).

Applicable Regulations

The conditions of this post-closure permit were developed in accordance with the following applicable provisions of 329 IAC 3.1:

- ID & Listing of Hazardous Waste: 329 IAC 3.1-6, 40 CFR 261
- Standards for Owners and Operators of Treatment, Storage, and Disposal Facilities: 329 IAC 3.1-9, 40 CFR 264 Subpart A
- General Facility Standards: 329 IAC 3.1-9, 40 CFR 264 Subpart B
- Ground Water Protection: 329 IAC 3.1-9, 40 CFR 264 Subpart F
- Post-Closure: 329 IAC 3.1-9, 40 CFR 264 Subpart G
- Financial Requirements: 329 IAC 3.1-15
- Landfills: 329 IAC 3.1-9, 40 CFR 264 Subpart N
- Corrective Action for Solid Waste Management Units: 329 IAC 3.1-9, 40 CFR 264 Subpart S
- Hazardous Waste Permit Programs: 329 IAC 3.1-13, 40 CFR 270 Subparts A, B, C, and D
- Inspection and Investigation: 329 IAC 3.1-1-3 and 329 IAC 3.1-1-4
- Enforcement: 329 IAC 3.1-1-5

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable rules and requirements contained in 329 IAC 3.1 and 40 CFR 260 through 270 as specified in the permit. Applicable rules are those which are in effect on the date of issuance of this permit. (See 329 IAC 3.1-13; 40 CFR 270.32)

This permit is based on the assumption that the information submitted in the post-closure permit application attached to the Permittee's letter dated May 17, 2006, and any subsequent amendments (hereafter referred to as the application), is accurate and that the facility has been or will be constructed and/or operated as specified in the application. Any inaccuracies found in the application may be grounds for the modification, revocation and reissuance, or termination of this permit (329 IAC 3.1-13-7), and potential enforcement action. The Permittee must inform the Indiana Department of Environmental Management (IDEM) of any deviation from, or changes in, the information in the application which would affect the Permittee's ability to comply with the applicable rules or permit conditions.

Pursuant to IC 13-15-5-3 and IC 4-21.5-3-5(f), this permit takes effect fifteen (15) days from receipt of this notice. If you wish to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a Petition for Administrative Review. If you seek to have the effectiveness of the permit stayed during administrative review, you must also file a Petition for Stay. The petition(s) must be submitted to the Office of Environmental Adjudication, Government Center North, Room 1049, 100 North Senate Avenue, Indianapolis, Indiana 46204, within fifteen (15) days after your receipt of this notice. The petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Identifying the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, or date of this notice will expedite review of the petition. Additionally, IC 13-15-6-2 requires that a Petition for Administrative Review must include:

- 1. The name and address of the person making the request.
- 2. The interest of the person making the request.
- 3. Identification of any persons represented by the person making the request.
- 4. The reasons, with particularity, for the request.
- 5. The issues, with particularity, proposed for consideration at the hearing.
- 6. Identification of the terms of the permit which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing licenses of the type granted or denied by the

Commissioner.

Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the Office of Environmental Adjudication. Filing of such a document is complete on the earliest of the following dates:

- 1. the date on which the petition is delivered to the Office of Environmental Adjudication, Government Center North, Room 1049, 100 North Senate Avenue, Indianapolis, Indiana 46204;
- 2. the date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or
- 3. the date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier.

The portions of the permit for which a Petition for Stay has been filed will take effect at the expiration of the additional fifteen (15)-day period unless or until an Environmental Law Judge stays the permit in whole or in part. This permit shall remain in effect until 10 years from the effective date unless revoked and reissued, modified, or terminated (329 IAC 3.1-13-7), or continued in accordance with IC 13-15-6-3.

This permit terminates and supersedes any other State hazardous waste management permit.

Issued this	day of	2007.
Dvv		
	as E. Linson, Chief	
	ts Branch	

BP Products North America, Inc. Whiting, Indiana IND000810861

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I. STANDARD CONDITIONS

A. <u>EFFECT OF PERMIT</u>

The Permittee is authorized to maintain and monitor disposed hazardous waste in accordance with the conditions of this State hazardous waste management post-closure permit.

Pursuant to 329 IAC 3.1 and 40 CFR 260 through 270 (for HSWA Provisions), compliance with the conditions of this State hazardous waste management permit generally constitutes compliance for purposes of enforcement, with the Indiana Environmental Statutes and Resource Conservation and Recovery Act (RCRA), as amended by Hazardous Solid Waste Amendments (HSWA), except for those requirements not included in the Permit which become effective by statute, or which are promulgated under 329 IAC 3.1 and 40 CFR Section 260 through 270, restricting the placement of hazardous wastes in or on the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any Order issued or any action brought under Section 3013 or Section 7003 of RCRA; Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601), commonly known as CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9606(a)), commonly known as SARA, or any other law providing for protection of public health or the environment. 329 IAC 3.1-13; 40 CFR 270.4; IC 13

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 329 IAC 3.1-13-7. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of the permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. In the event that a condition of this permit is stayed for any reason, all provisions of the permit severable from the stayed provisions shall take effect. With regard to stayed provisions of the permit, the Permittee shall continue to

comply with the related applicable and relevant interim status standards in 329 IAC 3.1-10, 3.1-13 and 3.1-14] until final resolution of the stayed condition, unless the Commissioner of the Indiana Department of Environmental Management (Commissioner) determines that compliance with the related applicable and relevant standards would be technologically incompatible with other conditions of this permit which have not been stayed. 329 IAC 3.1-13; 40 CFR 270.32

D. <u>DUTIES AND REQUIREMENTS</u>

- 1. <u>Duty to Comply</u> The Permittee shall comply with all conditions of the State hazardous waste management permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of IC 13 and is grounds for enforcement action or permit modification. 329 IAC 3.1-13-1; 40 CFR 270.30(a); 270.61
- 2. <u>Duty to Reapply</u> The Permittee shall submit a complete application for a new permit at least 180 days before this permit expires unless: a) the Permittee is no longer required to have a State hazardous waste management permit, or b) permission for submittal on a later date has been granted by the Commissioner (The Commissioner will not grant permission for the application to be submitted later than the expiration date of the existing permit.) 329 IAC 3.1-13-1; 329 IAC 3.1-13-3(h); 40 CFR 270.30(b)
- 3. Permit Expiration The duration of this permit shall not exceed 10 years from the effective date of the permit, except as provided by 329 IAC 3.1-13-15. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application for a new permit and through no fault of the Permittee, the Commissioner has not issued a new permit with an effective date under 329 IAC 3.1-13-14 on or before the expiration date of the previous permit. In the event the Permittee does not submit a complete renewal application in accordance with Permit Condition D2: all conditions herein will remain in effect until the permittee is notified otherwise by the Commissioner.
- 4. Need to Halt or Reduce Activity Not a Defense It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 329 IAC 3.1-13-1; 40 CFR 270.30(c)
- 5. <u>Duty to Mitigate</u> In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. 329 IAC 3.1-13-1; 40 CFR 270.30(d)

- 6. Proper Operation and Maintenance The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of a back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit. 329 IAC 3.1-13-1; 40 CFR 270.30(e)
- 7. <u>Duty to Provide Information</u> The Permittee shall furnish to the Commissioner, within a reasonable time, any relevant information which the Commissioner may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Commissioner, upon request, copies of records required to be kept by this permit. 329 IAC 3.1-13-1; 40 CFR 270.30(h); 329 IAC 3.1-9-1; 40 CFR 264.74
- 8. <u>Inspection and Entry</u> Pursuant to 329 IAC 3.1-1-13-1 and 40 CFR 270.30(i), the Permittee shall allow the Commissioner, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit (329 IAC 3.1-13-1; 40 CFR 270.30(i)(l));
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit (329 IAC 3.1-13-1; 40 CFR 270.30(i)(2));
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit (329 IAC 3.1-13-1; 40 CFR 270.30(i)(3)); and
 - d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by IC 13, any substances or parameters at any location (329 IAC 3.1-13-1; 40 CFR 270.30(i)(4)).

9. <u>Monitoring and Reporting</u>

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the groundwater to be analyzed must be the appropriate method from 329 IAC 3.1-6-1; 40 CFR 261, Appendix I. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW- 846 (as referenced in 40 CFR 260.11); Standard Methods for the Examination of Water and Wastewater, (20th Edition, 1998); or an equivalent method as specified in the attached Groundwater Monitoring Plan. 329 IAC 3.1-13-1; 40 CFR 270.30(j)(1)
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report, or record or for a period of time greater than three (3) years as specified elsewhere in this permit. These periods may be extended by request of the Commissioner at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. 329 IAC 3.1-13-1; 40 CFR 270.30(j)(2) and 40 CFR 264.74(b)
- c. Pursuant to 329 IAC 3.1-13-1; 40 CFR 270.30(j)(3), records of monitoring information shall include:
 - i. The date(s), exact place, and times of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) and laboratory who performed the analyses;
 - v. The analytical technique(s) or method(s) used. Analytical technique(s) or method(s) is defined as encompassing both the sampling technique (method) and method of chemical analysis used; and
 - vi. The result(s) of such analyses, including QA/QC documentation.
- d. Monitoring results shall be reported to the Commissioner at the intervals

specified elsewhere in this permit. 329 IAC 3.1-13-1; 40 CFR 270.30(1)(4)

- 10. Reporting Planned Changes The Permittee shall give notice to the Commissioner as soon as possible of any planned physical alterations or additions to the permitted facility. 329 IAC 3.1-13-1; 40 CFR 270.30(1)(1)
- 11. <u>Transfer of Permits</u> This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 329 IAC 3.1-13-1; 40 CFR 270.40(b) or 40 CFR 270.41(b)(2) to identify the new permittee and incorporate such other requirements as may be necessary under IC 13. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator, in writing, of the requirements of 329 IAC 3.1 and IC 13. 329 IAC 3.1-13-1; 40 CFR 270.40
- 12. Reporting Anticipated Noncompliance The Permittee shall give advance notice to the Commissioner of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notification does not excuse the Permittee's duty to comply with permit requirements. 329 IAC 3.1-13-1; 40 CFR 270.30(1)(2)
- 13. <u>Compliance Schedules</u> Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date. 329 IAC 3.1-13-1; 40 CFR 270.30(1)(5)
- 14. Twenty-four Hour Reporting The Permittee shall report to the Commissioner any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally to the IDEM 24 hour emergency telephone number 888/233-7745, within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. Pursuant to 329 IAC 3.1-13-1; 40 CFR 270.30(1)(6), this report shall include the following:
 - a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies.
 - b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;

- iii. Date, time, and type of incident;
- iv. Name and quantity of material(s) involved;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five (5)-day written notice requirement if the Commissioner waives the requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

- 15. Other Noncompliance The Permittee shall report all instances of noncompliance not otherwise required to be reported under Condition I.D. 12-14, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Condition I.D.14. 329 IAC 3.1-13-1; 40 CFR 270.30(1)(10)
- Other Information When the Permittee becomes aware that the facility failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Commissioner, the Permittee shall promptly submit such facts or information. 329 IAC 3.1-13-1; 40 CFR 270.30(1)(11)
- 17. <u>Submittal of Reports or Other Information</u> All reports or other information required to be submitted by the terms of this permit shall be sent to:

Commissioner Indiana Department of Environmental Management 100 North Senate Avenue Indianapolis, IN 46204 Attention: Chief, OLQ Permits Branch 18. All other requirements contained in RCRA, <u>as amended</u>, and in 40 CFR 270.30 not set forth herein are hereby fully incorporated in this permit.

E. SIGNATORY REQUIREMENT

All reports or other information requested by the Commissioner shall be signed and certified as required by 329 IAC 3.1-13-1; 40 CFR 270.11.

F. CONFIDENTIAL INFORMATION

The Permittee may claim confidential any information required to be submitted by this permit in accordance with 329 IAC 3.1-13-4, and IC 13-14-11-1.

G. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE

Except as noted, the Permittee shall maintain at the facility, until the post-closure period is completed and certified by the owner/operator and an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

- 1. Groundwater Monitoring Plan as required by 329 IAC 3.1-9, 40 CFR 264.97 and this permit and any document(s) referenced therein to describe on-site procedures.
- 2. Groundwater monitoring data as required by 329 IAC 3.1-9, 40 CFR 264.97 and this permit.
- 3. Post-Closure Plan as required by 329 IAC 3.1-9, 40 CFR 264.118(c), and this permit.
- 4. Inspection schedules as required by 329 IAC 3.1-9, 40 CFR 264.15(b)(2), and this permit.
- 5. Record of facility inspections, as required by 329 IAC 3.1-9, 40 CFR 264.15(b)(2), and this permit. These records must be kept for at least three (3) years from the date of the inspection per 40 CFR 264.15(d).

II. GENERAL FACILITY CONDITIONS

A. MAINTENANCE OF FACILITY

The Permittee shall maintain the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, ground water or surface water which could threaten human health or the environment

B. <u>SECURITY</u>

The Permittee shall comply with the security provisions of 329 IAC 3.1-9 and 40 CFR 264.14(b) and (c) as described in the Post-Closure Plan, Attachment C, which is incorporated herein by reference.

C. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection schedule in Attachment B, which is incorporated herein by reference. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 329 IAC 3.1-9 and 40 CFR 264.15(c). Records of inspections shall be kept as required by 329 IAC 3.1-9 and 40 CFR 264.15(d).

D. RECORDKEEPING AND REPORTING

If the Permittee is a generator of hazardous waste, they shall comply with the biennial report requirements of 329 IAC 3.1-9 and 40 CFR 264.75.

E. POST-CLOSURE

- 1. <u>Performance Standard</u> The Permittee shall maintain post-closure of the facility as required by 329 IAC 3.1-9 and 40 CFR 264.117 and in accordance with the Post-Closure Plan, Attachment C, which is incorporated herein by reference.
- 2. <u>Certification of Post-Closure Care</u> No later than sixty (60) days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee shall submit to the Commissioner, by registered mail, a certification that the post-closure care for the hazardous waste disposal unit was performed in accordance with the specifications of the approved Post-Closure Plan. The certification must be signed by the Permittee and an independent registered professional engineer. Documentation supporting the independent, registered professional engineer's certification must be furnished to the Commissioner upon request until the Commissioner releases the Permittee from

the financial assurance requirements for post-closure care under 329 IAC 3.1-15-6.

F. <u>COST ESTIMATE FOR FACILITY POST-CLOSURE</u>

The Permittee's post-closure cost estimate, prepared in accordance with 329 IAC 3.1-15-5, is specified in the Post-Closure Plan, Attachment C.

- 1. The Permittee must revise the post-closure cost estimate whenever there is a change in the facility's post-closure plan as required by 329 IAC 3.1-15-5(c).
- 2. The Permittee must keep at the facility the latest post-closure cost estimate as required by 329 IAC 3.1-15-5(d).

G. <u>FINANCIAL ASSURANCE FOR POST-CLOSURE CARE</u>

The Permittee shall demonstrate continuous compliance with 329 IAC 3.1-15-6 by providing documentation of financial assurance, as specified by 329 IAC 3.1-15-10, in at least the amount of the cost estimates required by Permit Condition II.F. Changes in financial assurance mechanisms must be approved by the Commissioner pursuant to 329 IAC 3.1-15-6.

H. <u>INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL</u> INSTITUTIONS

The Permittee shall comply with 329 IAC 3.1-15-9 whenever necessary.

III. LANDFILL CONDITIONS

A. WASTE IDENTIFICATION

F038

The Permittee disposed of approximately 100,000 cubic yards of sludge, contaminated soil and other material containing the following hazardous waste into the storm water surge basin surface impoundment.

Waste Code	Description
·	

D010 Selenium

F037 Petroleum refinery primary oil/water/solids

separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and

impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in § 261.31(b)(2)

(including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not

included in this listing.

Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not

limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.

K048	Dissolved air flotation (DAF) float from
	the petroleum refining industry.
K049	Slop oil emulsion solids from the
	petroleum refining industry.
K051	API separator sludge from the petroleum
	refining industry.

Following closure of the surface impoundment the regulatory status of the unit is changed to that of a landfill for permitting purposes.

B. LOCATION INFORMATION

The landfill is located in the area as shown in Facility Description, Attachment A, incorporated herein by reference.

C. SURVEYING AND RECORD KEEPING 329 IAC 3.1-9, 40 CFR 264.309

The owner or operator of a landfill must maintain the following items:

- 1. On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and
- 2. The contents of each cell and the approximate location of each hazardous waste type within each cell.

D. POST-CLOSURE 329 IAC 3.1-9, 40 CFR 264.310

After final closure, the owner or operator must comply with all post-closure requirements contained in 329 IAC 3.1-9 and 40 CFR 264.117 through 40 CFR 264.120, including maintenance and monitoring throughout the post-closure care period. The owner or operator must:

- 1. Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;
- 2. Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 329 IAC 3.1-9 and 40 CFR 264 Subpart F;
- 3. Prevent run-on and run-off from eroding or otherwise damaging the final cover; and
- 4. Protect and maintain surveyed benchmarks used in complying with 329 IAC 3.1-9 and 40 CFR 264.309.

IV. CORRECTIVE ACTION CONDITIONS

A. STANDARD REQUIREMENTS

1. Corrective Action At The Facility

In accordance with Section 3004(u) of RCRA (Indiana Code 13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must institute Corrective Action as necessary to protect human health and the environment for all releases of hazardous waste(s) or hazardous constituent(s) from any solid waste management unit (SWMU) or area of concern (AOC) at the facility, regardless of the time the waste was placed in such units. The Permittee shall perform all such work in a manner consistent with, at a minimum, the Corrective Action Scope of Work found in Attachment E.

2. Corrective Action Beyond The Facility Boundary

In accordance with Section 3004(v) of RCRA (Indiana Code 13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must implement Corrective Action(s) beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the IDEM's satisfaction that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RCRA Facility Investigation, Corrective Measures Study, and Corrective Measures Implementation phases, as determined to be necessary on a case-by-case basis.

3. Notification

a. Field Activities

The Permittee shall notify IDEM at least seven (7) days before engaging in any field activities, such as well drilling, installation of equipment, or sampling. At the request of IDEM, the Permittee shall provide IDEM or its authorized representative split samples of all samples collected by the Permittee pursuant to this permit. Similarly, at the request of the Permittee, IDEM shall allow the Permittee or its authorized representatives to take split or duplicate samples of all samples collected by IDEM under this permit.

b. Submittals

Four (4) copies of all reports, plans, and other submissions relating to or required by this permit shall be sent to:

Indiana Department of Environmental Management OLQ Permits Branch 100 N. Senate Avenue Indianapolis, IN 46204 Attention: Chief, Hazardous Waste Permit Section

B. IDENTIFICATION OF SWMUs

1. Definitions

- a. "Solid Waste Management Unit (SWMU)" means any discernable unit, permitted or unpermitted, existing or historical, at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.
- b. "Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes or hazardous constituents into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents.
- c. "Hazardous constituent" means any constituent identified in appendix VIII of 40 CFR part 261, or any constituent identified in appendix IX of 40 CFR part 264.
- d. "Area of Concern (AOC)" means a unit or area which does not meet the definition of a SWMU, but which merits further investigation to determine the presence or absence of releases.
- e. "Facility" means all contiguous property under the control of the owner/operator of a facility seeking a permit under subtitle C.

2. SWMUs and AOCs Requiring Corrective Action

Based on the information contained in the administrative record, corrective action is required at the SWMUs and AOCs listed below. A map showing the location of these SWMUs and AOCs is given in Attachment E. Due to the close proximity of the SWMUs and AOCs within the Lakefront WWTP property, groundwater monitoring for all units is being addressed as a single unit. Details of the groundwater monitoring system are in Permit Condition D and Attachment D of this permit.

The following 15 SWMUs and two areas of concern (AOCs) have been identified at the Lakefront WWTP facility. A more detailed summary of the SWMUs and AOCs is included as Table E-1 in Attachment E. A detailed description of the history, constituents, and remediation at the Storm Water Surge Basin (SWMU 15) is included in the permit application.

SWMU Number	SWMU Name	
1	No. 5 Separator Area	
2	Former Sludge Pits	
3	Process Sewers and Mud Box	
4	No. 6 Separator	
5	Former Slop Oil Tanks Area	
6	No. 7 Separator Area	
7	DAF Float Secondary Storage Tanks Area	
8	Activated Sludge Plant (ASP)	
9	Final Filter Building	
10	Fluid Bed Incinerator (FBI), an operating hazardous waste	
	unit	
11	FBI Feed Area (includes Tank 564, a closed regulated	
	unit)	
12	FBI Fly Ash Press Area, an operating hazardous waste	
	unit	
13	Hazardous Waste Storage Building (HWSB)	
14	Spent Carbon Canister Accumulation Area	
15	Storm Water Surge Basin (SWSB), a closed hazardous	
	waste unit	
AOC Number	AOC Name	
1	Free Phase Hydrocarbon on the Groundwater South and	
	East of the SWSB	
2	Free Phase Hydrocarbon on the Groundwater Near the	
	French Drains	

^{*}On November 18, 2006 a spill event occurred in the vicinity of Sump #1, adjacent to the storm water surge basin. At the time of the draft permit issuance information was still being gathered on the impact of the spill. The final permit may be revised to include any necessary requirements to address this release.

C. NEWLY IDENTIFIED SWMUs OR RELEASES

1. Notification Requirements

The Permittee shall notify the IDEM, within thirty (30) days of discovery, of the following information requirements for any new SWMU identified at the facility, in accordance with 329 IAC 3.1-13-1 and 40 CFR 270.14(d):

- a. the location of the unit on the site topographic map;
- b. designation of the type of unit;
- c. general dimensions and structural description (supply any available drawings);
- d. when the unit was operated; and
- e. specifications of all waste(s) that have been managed at the unit.

2. Release Information

The Permittee must submit to the IDEM, within thirty (30) day of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing SWMU.

3. Corrective Action

The IDEM will review the information provided in Condition IV.C. 1 and 2 above, and may as necessary, require further investigations or corrective measures. The Permittee shall submit a written RFI Workplan to the Section Chief of the Hazardous Waste Permit Section in accordance with Condition IV.D.2.

D. CORRECTIVE ACTION ACTIVITIES

The major tasks and required submittal dates are shown below. Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule (Condition IV.F.).

1. Interim Measures (IM)

a. The Permittee may undertake interim measure activities to prevent or minimize the further spread of contamination while long-term remedies

are pursued. An IM Workplan shall be submitted to the IDEM for approval before the Permittee initiates any remedial activity. The interim measure(s) must be capable of being integrated into any long-term solution at the facility.

b. In the event the Permittee identifies an immediate threat to human health or the environment, the Permittee shall immediately notify the Section Chief orally and in writing within seven (7) days summarizing the immediacy and magnitude of the potential threat to human health or the environment.

Upon receiving this information, the IDEM will determine if an IM Workplan is necessary. If one is necessary, the Section Chief will send a notice to the Permittee requiring the submission of an IM Workplan. Within twenty-one (21) days after receiving this notice, the Permittee shall submit to the Section Chief a workplan for approval that identifies the interim measure(s).

The workplan should be consistent with and integrated into any longterm solution at the facility. In addition, the following Interim Measure schedule shall be initiated:

- i. Within five (5) days, the Permittee shall provide an alternate water supply to parties that have a contaminated water supply well;
- ii. Within seven (7) days, the Permittee shall submit a report to the Section Chief detailing the activity pursued and a plan for further Interim Measures activity;
- iii. Within seven (7) days following the Section Chief's transmission of comments, the Permittee shall revise the plan in accordance with the comments; and
- iv. Within seven (7) days following the IDEM's approval or modification of the plan, the Permittee shall implement the revised plan in accordance with the schedule therein.

2. RCRA Facility Investigation (RFI)

The Permittee shall conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous waste(s) and hazardous constituent(s) from all SWMUs and AOCs identified as requiring an RFI.

a. <u>RFI Workplan</u>

The Permittee shall submit a written RFI Workplan to the Section Chief within ninety (90) days after written notification by the Section Chief that further investigation is necessary.

The IDEM will approve, modify and approve, or disapprove and provide comments on the Workplan in writing to the Permittee. Within sixty (60) days of receipt of such comments, the Permittee shall provide a response to the IDEM's comments.

b. RFI Implementation

Within thirty (30) days of the IDEM's written approval of the RFI Workplan, the Permittee shall implement the RFI Workplan according to the terms and schedule in the approved RFI Workplan.

c. RFI Report

Within ninety (90) days after the completion of the RFI, the Permittee shall submit an RFI Report to the Section Chief. The RFI Report shall describe the procedures, methods, and results of the RFI. The report must contain adequate information to support further corrective action decisions at the facility. After the Permittee submits the RFI Report, the IDEM shall either approve or disapprove the report in writing. If the IDEM disapproves the report, the Section Chief shall notify the Permittee in writing of the deficiencies. The Permittee has thirty (30) days after receipt of the IDEM's comments to submit a revised RFI Report to the Section Chief.

3. Determination of No Further Action

a. Permit Modification

After completion of the RFI, and based on its results and other relevant information, the Permittee may submit an application to the Section Chief for a permit modification under 40 CFR 270.42 to terminate the corrective action tasks of the Corrective Action Activities Schedule for all or a portion of the facility. Tasks identified in Permit Condition IV.F. for the SWMUs, SWMAs, and/or the AOCs identified in the modification (for a determination of no further action) shall be stayed pending a decision by IDEM. This permit modification must conclusively demonstrate that there are no releases of hazardous

waste(s), including hazardous constituents, from SWMUs or AOCs at the facility that pose a threat to human health or the environment.

If, based upon review of the Permittee's request for a permit modification, the results of the completed RFI, and other information, IDEM determines that releases or suspected releases that were investigated either are nonexistent or do not pose a threat to human health or the environment, IDEM will grant the requested modification.

b. <u>Periodic Monitoring</u>

A determination of no further action shall not preclude the IDEM from requiring continued or periodic monitoring of air, soil, groundwater, or surface water, if necessary to protect human health and the environment, when site-specific circumstances indicate that potential or actual releases of hazardous waste(s), including hazardous constituents, are likely to occur.

c. Further Investigations

A determination of no further action shall not preclude the IDEM from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates that a release or likelihood of a release from a SWMU or AOC at the facility is likely to pose a threat to human health or the environment. In such a case, the IDEM shall initiate a modification to the Corrective Action Activities Schedule to rescind the determination made in accordance with Condition IV.D.3.a. Additionally, the IDEM may determine that there is insufficient information on which to base a determination, and may require the Permittee to perform additional investigations as needed to generate the needed information.

4. <u>Corrective Measures Study (CMS) and Remedy Selection</u>

If the IDEM determines, based on the results of the RFI and other relevant information, that corrective measures are necessary, the Section Chief will notify the Permittee in writing that the Permittee shall conduct a CMS. The purpose of the CMS is to develop and evaluate the corrective action alternative(s) that will satisfy the performance objectives specified by the IDEM. The CMS shall be conducted within sixty (60) days of notification by the Section Chief that the CMS is required. This period of time may be extended by the Section Chief if necessary to adequately complete the CMS. The major tasks and required submittal dates are shown below. Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule

(Condition IV.F.).

a. <u>CMS Report</u>

Within sixty (60) days after the completion of the CMS, the Permittee shall submit a CMS Report to the Section Chief. The CMS Report shall summarize the results of the investigations for each remedy studied and must include an evaluation of each remedial alternative. After the Permittee submits the CMS Report, the IDEM shall either approve, modify and approve, or disapprove the Report. If the IDEM disapproves the Report, the Section Chief shall notify the Permittee in writing of the deficiencies. The Permittee has thirty (30) days after receipt of the IDEM's comments to submit a revised CMS Report to the Section Chief. The CMS Report, as approved, becomes an enforceable condition of this permit.

b. CMS Remedy Selection

The IDEM will select a corrective measure for implementation based on the following factors. The corrective measure selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the source(s) of releases so as to reduce or eliminate further releases of hazardous waste(s) (including hazardous constituent(s)); (4) minimize the transfer of contamination from one environmental medium to another; and (5) comply with all applicable standards for management of wastes.

If two or more of the corrective measures studied meet the threshold criteria set out above, the IDEM will choose among alternatives for Corrective Measures Implementation by considering remedy selection factors including: (1) long-term reliability and effectiveness; (2) the degree to which the corrective measure will reduce the toxicity, mobility or volume; (3) the corrective measure's short-term effectiveness; (4) the corrective measure's implementability; and (5) the relative cost associated with the alternative. In selecting the corrective measure(s), the IDEM may also consider such other factors as may be presented by site-specific conditions.

5. Permit Modification

If the IDEM determines that there is sufficient public interest in the site to justify public notice of the remedy selection, then within thirty (30) days of IDEM's selection of a corrective measure, IDEM or the Permittee will initiate a permit

modification, pursuant to 40 CFR 270.41 or 40 CFR 270.42, respectively, for the implementation of the corrective measure(s) selected.

6. <u>Corrective Measures Implementation (CMI)</u>

a. If the corrective measure(s) recommended in the Corrective Measures Study Report is (are) not the corrective measure(s) selected by IDEM after consideration of public comments, the Section Chief shall inform the Permittee in writing of the reasons for such decision. The Permittee shall implement the corrective measure(s) upon the effective date of the permit modification, or in the situation where the IDEM has determined that no permit modification is needed, with 30 days of notification in writing by the IDEM.

b. Financial Assurance

As part of the permit modification of this permit to incorporate the CMI, the Permittee shall provide financial assurance in the amount specified by the IDEM for necessary corrective action activities as required by 40 CFR 264.101(b) and (c).

7. Incorporation of plans and reports

All approved plans and reports prepared for this permit shall be incorporated into this permit on the date the Section Chief or his/her designee approves such plan or report.

E. DISPUTE RESOLUTION

- 1. If IDEM disapproves or modifies and approves any submission required by Condition IV. of the permit, IDEM shall provide the Permittee with a written notice setting forth the reasons for the disapproval or modification and approval.
- 2. If the Permittee disagrees, in whole or in part, with any written decision concerning IDEM's disapproval or modification and approval of any submission required by Condition IV. of the permit, the Permittee shall notify IDEM of the dispute. The Permittee and IDEM shall informally, and in good faith, endeavor to resolve the dispute.
- 3. If the Permittee and IDEM cannot resolve the dispute informally, the Permittee may pursue the matter formally by submitting a written statement of position to the Commissioner or his/her designee, within twenty-eight (28) days of receipt of IDEM's written disapproval or modification and approval. The Permittee's

statement of position shall set forth the specific matters in dispute, the position that the Permittee asserts should be adopted as consistent with the requirements of the permit, the basis for the Permittee's position, and shall include any supporting documentation. If the Permittee fails to follow any of the requirements contained in this paragraph, then it shall have waived its right to further consideration of the disputed issue.

- 4. IDEM and the Permittee shall have an additional fourteen (14) days from the date of the Commissioner's receipt of the Permittee's statement of position to meet or confer to attempt to resolve the dispute. This time period may be extended by IDEM for good cause. If agreement is reached, the Permittee shall submit a revised submission, if necessary, and shall implement the submission in accordance with such agreement.
- 5. If the IDEM and the Permittee are not able to reach agreement within the 14-day period, or such longer period corresponding to IDEM's extension for good cause, the Permittee may submit any additional written arguments and evidence not previously submitted, or further explain any arguments or evidence previously submitted, to the Commissioner. Based on the record, the Commissioner, or delegate, will thereafter issue a written decision that shall include a response to the Permittee's arguments and evidence. This written decision will constitute final agency action.
- 6. Notwithstanding the invocation of this dispute resolution procedure, the Permittee shall proceed to take any action required by those portions of the submission and of the permit that IDEM determines are not substantially affected by the dispute. The activity schedule for those portions of the submission and of the permit which are substantially affected by the dispute shall be suspended during the period of dispute resolution.

F. CORRECTIVE ACTION ACTIVITIES SCHEDULE

	Activity	<u>Due Date</u>
1.	IM Workplan	21 days after notice by the Section Chief or his/her designee
2.	RFI Workplan	90 days after notice by the Section Chief or his/her designee
3.	Notification of newly identified SWMUs	30 days after discovery
4.	RFI Workplan for newly identified SWMUs	90 days after receipt of Section Chief's notification
5.	RFI Workplan modification	60 days after receipt of Section Chief's comments
6.	RFI Implementation	30 days after RFI Workplan approved
7.	RFI Report	90 days after completion of RFI
8.	RFI Report Modification	30 days after receipt of Section Chief's comments
9.	Progress Reports on Tasks I through IV (See Corrective Action Scope of Work)	Quarterly, on the tenth day of January, April, July, and October of each year after effective date of permit
10.	CMS Report	60 days after receipt of Section Chief's notification
11.	CMS Report modification	30 days after receipt of Section Chief's comments
12.	Permit Modification for Corrective Measure Implementation	30 days after receipt of Section Chief's notification (Modification may be a Class 1, 2, or 3 at Section Chief's discretion)
13.	CMI Program Plan	30 days after effective date of permit modification

14. CMI Program Plan Modification 30 days after receipt of Section Chief's comments
15 CMI Reports Quarterly until construction of corrective measure is complete
16. CMI Report Modification 30 days after receipt of Section Chief's comments
17. Operation and Maintenance Progress Reports Quarterly, on the tenth day of January, April, July, and October of each year after effective date of permit



V. GROUNDWATER MONITORING CONDITIONS

A. GROUND WATER MONITORING PROGRAM

This facility is bounded by slurry walls, sheet pile walls, and french drains; which confine the contaminated groundwater and free product to prevent it from impacting Lake Michigan. A site map included in Attachment E shows the locations of the various units, wells, remediation structures, and confining structures. The confining structures are on the edge of Lake Michigan, so monitoring wells placed outside the structures would not adequately detect releases from the unit. The groundwater treatment system is designed to collect and treat the contaminated groundwater and maintain an inward gradient to prevent outward flow of groundwater. This monitoring program is designed to verify that an inward gradient is maintained and that the plumes of contamination are diminishing. Monitoring wells 208, 209, and 212 are within the walls and cannot detect a leak getting past the walls, but since they are in a downgradient position close to the walls the samples collected from them will be the highest concentrations that could be leaking past the barriers. The goal is to keep those concentrations down to a level that would not negatively impact Lake Michigan if there were a release.

Concentration Limits

Concentration limits for selected constituents that will be monitored in the groundwater are identified in the following table.

Parameter	Well	Units	Concentration Limits
Arsenic (dissolved)	208B	mg/L	0.07
Arsenic (dissolved)	all other wells	mg/L	0.05
Barium (dissolved)	all wells	mg/L	2.0
Lead (dissolved)	all wells	mg/L	0.015
Benzene	208A	mg/L	0.015
Benzene	all other wells	mg/L	0.005
Toluene	all wells	mg/L	1.0
Total Xylenes	all wells	mg/L	0.27

B. GROUNDWATER MONITORING SYSTEM

1. <u>Monitoring System</u>

The groundwater monitoring system is described in Appendix D-2 of Attachment D.

2. <u>Operation and Maintenance</u>

The Permittee will operate and maintain the groundwater monitoring system as outlined in the Groundwater Monitoring Plan in Attachment D.

3. <u>Installation of Monitoring Wells</u>

In the event that new, or replacement, monitoring wells are necessary, the Permittee will submit a written request for a permit modification to authorize a change to the approved ground water monitoring sytem. The Permittee will consult with IDEM and seek approval prior to initiating any well installation program or other substantive changes in the monitoring network or program.

C. SAMPLING PROCEDURE

The Permittee will use the sampling procedures described in Appendix 3 of the Groundwater Monitoring Plan (SOP for Groundwater Sample Acquisition) to collect, preserve, and control all ground water samples.

D. STATISTICAL EVALUATIONS

The Permittee will determine whether there is statistically significant evidence of increased contamination for each hazardous constituent in each monitoring well by statistically comparing ground water analytical results with the concentration limits contained in Permit Condition V.A.

F. FREQUENCY FOR COLLECTING SAMPLES AND CONDUCTING EVALUATIONS

The Permittee will follow the sampling and evaluation program outlined in the Groundwater Monitoring Plan in Attachment D.

H. EXCEEDANCE OF CONCENTRATION LIMITS

If the Permittee determines, pursuant to Permit Condition V.D., that any concentration limit at Permit Condition V.A. is being exceeded at any monitoring well the Permittee will:

1. <u>Provide Notification</u>

Notify the Commissioner of this finding in writing within fourteen (14) days. The notification will indicate what concentration limit(s) has (have) been exceeded.

2. Submit A Corrective Action Plan

Submit a corrective action plan to address the increase within 60 days of discovery of the exceedence.

J. PERMIT MODIFICATIONS

If the Permittee determines that the monitoring program no longer satisfies the requirements for monitoring outlined in Permit Condition V.A. the Permittee must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

K. RECORD KEEPING AND REPORTING

Within 60 days of the completion of each routine or verification ground water sampling event, the Permittee will enter the results of each ground water sampling event into the facility record. Additionally, a complete ground water report (two hard copies and one digital copy) will be submitted annually.

VI. COMPLIANCE SCHEDULE CONDITIONS

- 1. Within thirty (30) days of the effective date of the permit the Permittee shall provide a revised Section 4.3, "Surface Water Collection Transfer Pumps", of the "SWSB Post-Closure Operation and Maintenance Plan" in Attachment B.
- 2. Within sixty (60) days of the effective date of the permit the Permittee will submit a statistical analysis plan designed to meet the goals outlined in Permit Condition V.A. and Section 2 of the Groundwater Monitoring Plan in Attachment D.

